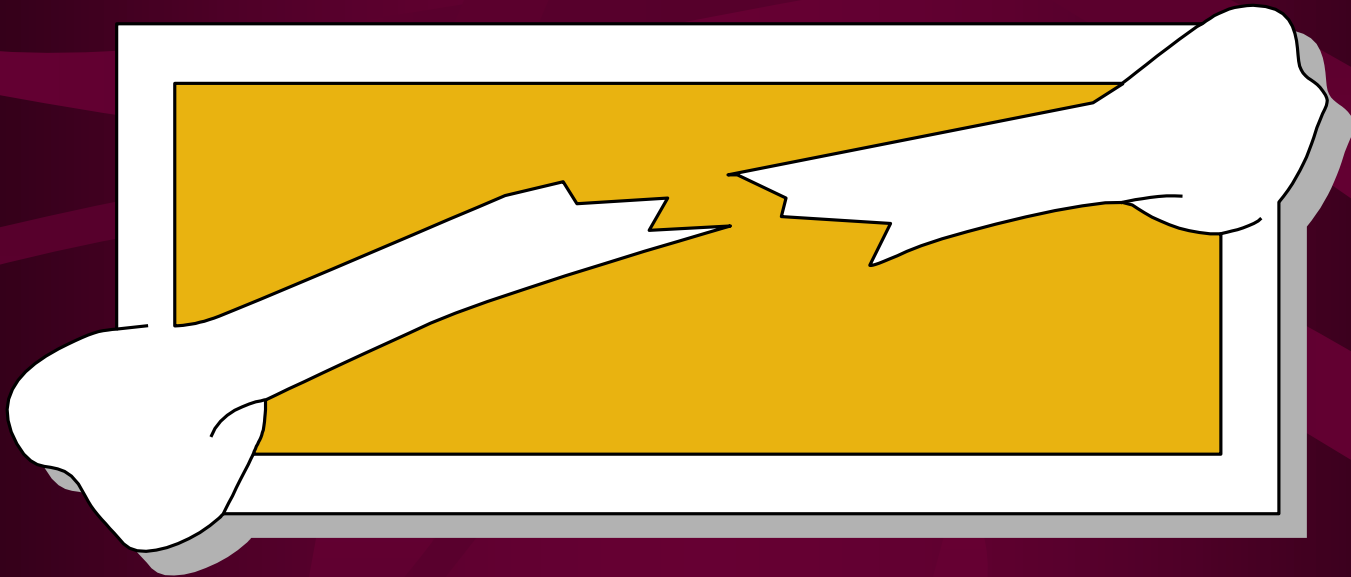


Joint, and Muscle Injuries



Dislocations

- **Joint is pulled apart**
- **Bone are not aligned properly**

Dislocations: What To Do

- Check CSM
- Splint (do not reduce)
- Medical attention
 - Sometimes you may try to reduce a n anterior shoulder, kneecap or finger (wilderness)
- Never reduce: spine, elbow, wrist, knee, hip

Anterior Shoulder Dislocation

- Victim holds upper arm away from body
- Sling won't work
- Extreme pain
- Shoulder appears squared off
- Loss of function
- Physician realignment

Knee Dislocation

- Major artery behind knee
 - May need to avoid application on cold
- No ankle pulse? Try to realign once?
- Stabilize knee in present position
- Medical attention
- UC Davis athlete
- Splinting lab

Additional Extremity Injuries

- Sprains
- Strains
- Contusions
- Tendonitis
 - Treat all with RICE

Sprains

- Ligament damage
- Ligaments connect bone to bone
- Primary stabilizer of joints
 - Treatment: RICE

Strains

- Pulled muscle
- Occurs when:
 - Muscle extended beyond its normal range of motion
 - muscle is not warmed up (stretched)

Possible Signs of a Strain

- Sharp pain / stiffness
- Extreme tenderness
- Cavity, indentation, bump
- Severe weakness or loss of function

Tendonitis

Inflammation of a Tendon

- Musculotendinous unit
 - Tendon connects muscle to bone
 - Tennis elbow
 - Little leaguers elbow
- Treatment: RICE

Muscle Contusions (Bruises)

- Swelling
- Pain
- Tenderness
- Discoloration
 - Treatment: RICE

Muscle Cramps (Uncontrolled Spasms)

- Night cramps and heat cramps
- May be caused by:
 - Dehydration
 - Electrolyte imbalance
- Charley horse

Muscle Cramps: What To Do

- **Stretch the muscle or Apply pressure**
- Consume fluid with electrolytes
 - Gatorade / sports drinks / lightly salted water
- Pinch upper lip, hard??
 - Acupuncture technique
- **DO NOT MASSAGE**

Ankle and Foot Injuries

- Leave shoe on? Some controversy
- Horseshoe shaped pad
- RICE
- Anti-inflammatory drugs

RICE

- Rest
- Ice
- Compression
- Elevation

RICE

- RICE will eliminate or reduce swelling = faster recovery
- NEVER use HEAT initially for sprains, strains, fractures, bruises etc.

Rest

- Speeds up healing
- Reduces blood flow to the area
- Reduces swelling
 - Using body part increases blood flow to the area

Ice

- Vasoconstriction
- Apply 20-30 minutes every 2-3 hours (variable)
- Apply for the first 48-72 hours
 - (variable – p. 230: 24-48 hours)
 - Severe injury? 72 hrs. recommended

Icing Methods

- Commercial hot/cold packs
- Ice bags (1 part alcohol, 3 parts water)
- Ice cups
- Frozen vegetables
- Cold, wet towels from the freezer
- Snow
- Contrast baths (1 min. cold, 4 min. warm: variable)

Caution With Ice

- Frostbite
- Do not ice posterior knee (nerve damage)
- Raynaud's syndrome

Compression

- Fill hollow areas with padding
- Wrap towards the heart
 - Loosen at night

Elevation

- Controls swelling and pain
- Elevate first 72 hours

Using Heat for Injuries

- 48-72 hours after injury
(variable)
- Vasodilation

Blood Under the Nail

- Heat pointed metal object, burn through nail
- Drill through the nail???
- Treat as minor wounds